

SEDIMENT BASIN DESIGN INFORMATION CLEAN OUT SPILLWAY STABILI-ELEVATION W_S ZATION DAM TOP OF DAM INV. IN DIAM LENGTH DIAM PHRAGMS

TEMPORARY SEDIMENT BASIN ***

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TEMPORARY SEDIMENT BASIN*** (WITH EMERGENCY SPILLWAY)

PRINCIPAL SPILLWAY DESIGN W/ ANTI-SEEP COLLAR

-SATURATED ZONE

CREST OF EMERGENCY SPILLWAY

-RISER CREST

EMERGENCY SPILLWAY

|---₩S---|

H = HEAD ON PIPE THROUGH EMBANKMENT

DIAPHRAGMS \ EXISTING SURFACE —

MOISTURE—DENSITY TESTS MAY BE REQUIRED BY THE CITY INSPECTOR ON THE EMBANKMENT. THESE TESTS, IF REQUIRED, WILL BE PROVIDED

BY THE CONTRACTOR. (SEE NOTE #2)

CUTOFF TRENCH TO EXTEND TO IMPERVIOUS STRATUM

L = LENGTH OF PIPE THROUGH EMBANKMENT

Dp = DIAMETER OF PIPE THROUGH EMBANKMENT

h = HEAD OVER RISER CREST

 $D_r = DIAMETER OF RISER$

UPSTREAM

-ANTI SEEP

DETAIL***

CONNECTIONS BETWEEN

NON-PERFORATED

C.M.P. RISER

THE ANTI-SEEP AND THE BARREL MUST BE

WATERTIGHT

DEWATERING

DCR Standard & Spec. Number 3.14

CONTROL SECTION -

EMERGENCY SPILLWAY SHOULD NOT BE CONSTRUCTED

DESIGN HIGH WATER

(25-YR. STORM ELEV.)

DESIGN HIGH WATER

TOP OF DAM WIDTH W_

CUTOFF TRENCH /

CUTOFF

SECTION THRU DAM

GENERAL NOTES-SEDIMENT BASIN

2. Embankment material to be taken from approved borrow area, free from roots, woody vegetation and oversized stones. Material shall be placed in 6" layers (loose) and

4. The top and sides of the embankment shall be covered with topsoil and properly seeded,

8. All construction shall conform to City of Manassas Standards and Specifications and

9. Temporary silt basins to be constructed prior to beginning rough grading operations. 10. Temporary silt basins to be removed and disturbed area stabilized as per approved plan.

the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.

1. The site shall be cleared and grubbed and unsuitable material removed.

5. Emergency spillway shall be cut into natural ground and stabilized.

7. Silt shall not be dumped in the downstream side of the silt basin.

6. Clean out elevation to be marked on riser in red paint.

11. Temporary silt basins to be maintained by developer. 12. Construction stake—out to be proved for each dam.

compacted to at least 95% density.

mulched and fertilized.

3. Reservoir area shall be cleared and grubbed.

1 : 1 SIDE SLOPES

DOWNSTREAM

(25-YR. STORM ELEV.)

OVER FILL MATERIAL

"DRY" STORAGE -

"WET" STORAGE

CONCRETE BASE -

RIP RAP AROUND

TRASH RACK DETAIL

Weld 1/2" bars to

c.m. coupling band and attach to riser

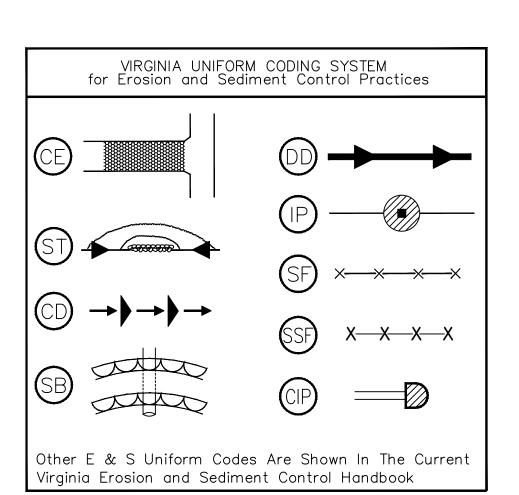
SEDIMENT CLEANOUT POINT _
("WET" STORAGE REDUCED

TO 34 C.Y./ AC.)

SOILS TYPE(S) Erodibility (K) Factor Soil Group

SCALE: 1" =

SOILS MAP



STORMWATER MANAGEMENT COMPLIANCE

(Check Appropriate Block)

Owner/developer will provide on-site stormwater management facility(ies) to accommodate additional storm drain run-off.

Owner/developer requests the ability to provide a pro-rata cash contribution in-lieu of providing on-site stormwater management

Less Than or Equal to 40% Impervious Formula: $\$/Acre = A \times I$ Greater Than 40% Impervious Formula: $\$/Acre = B + (I^2 \times C)$

Disturbed Acreage = _____ ENR Construction Cost Number = ____

 $A = (3,400 \times D)$ __(400 x D) $(6,000 \times D)$

(Current ENR Construction Cost Index / 3,726) (Percent of Imperviousness, i.e., 40% = .40)

\$_____ (Dollar Amount)
**To Be Computed With Final Submission

Owner/developer already complies with stormwater management requirements. Examples would include: a reduction in the impervious area or facility(ies) or existing on—site facilities which were installed to accommodate this proposed development. No fee is required or applicable in this circumstance.

COST ESTIMATE OF SILTATION CONTROL MEASURES (In-Place)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
	DIVERSION DIKE	L.F.			
	SILT FENCE	L.F.			
	SUPER SILT FENCE	L.F.			
	INLET PROTECTION	L.F.			
	OUTLET PROTECTION	L.F.			
	SEDIMENT TRAP	L.F.			
	CONSTRUCTION ENTRANCE	EACH			
	CHECK DAM	EACH			
	RIP RAP	TON			
	SOD	S.Y.			
	SEEDING OPERATION	1000 S.F.			
	SEDIMENTATION DAM NO.	JOB			
15	5% ADMINISTRATIVE CO	OST			
TC	OTAL PROJECT COST				

FOR ADDITIONAL INFORMATION PERTAINING TO THESE DRAWINGS, PLEASE REFERENCE THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, CURRENT EDITION, CHAPTER 3, ARTICLES 3.01 THRU 3.39.

ANY DEVIATION OR CHANGE IN THESE PLANS MUST BE APPROVED BY THE DEVELOPMENT SERVICES MANAGER PRIOR TO CONSTRUCTION.

*** ALL DRAWINGS NOT TO SCALE.

CITY OF MANASSAS STANDARD DETAIL- EROSION CONTROL REVISED: APRIL 28, 2010

SHEET

OF

SHEETS

ENGINEER'S SEAL & SIGNATURE